

CLAIMS

It is claimed:

1. A screen assembly for one or more filtering media, said screen assembly comprising:
5 a support screen for supporting said one or more filtering media, comprising
a first plurality of wires oriented in a first direction; and
a second plurality of wires oriented in a second direction and making contact
with said first plurality of wires to form a plurality of intersections between said first plurality
of wires and said second plurality of wires, each of said intersections being welded.
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2. The screen assembly of claim 1, wherein said one or more filtering media further
comprises:
at least one relatively finer filtering screen secured with respect to a surface of said
support screen.
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3. The assembly of claim 2, wherein said support screen is mechanically stronger than
said at least one relatively finer filter screen and mechanically supports said at least one
relatively finer screen.

3. The assembly of claim 1, wherein said first plurality of wires comprises a planar surface for engaging and supporting said one or more filtering media.
- 5 4. The assembly of claim 1, wherein said first plurality of wires is substantially straight, and said second plurality of wires is substantially straight.
5. The assembly of claim 4, wherein said first plurality of wires are intersected by a first plane, and said second plurality of wires are intersected by a second plane, such that
10 the first plane and the second plane are substantially parallel to each other.
6. The assembly of claim 1, wherein said first plurality of wires comprise a flat surface and said second plurality of wires comprise a flat surface.
- 15 7. The assembly of claim 1, wherein said first plurality of wires comprise a flat surface and said second plurality of wires comprise a rounded surface.
8. The assembly of claim 1, wherein said first plurality of wires comprise a rounded surface and said second plurality of wires comprise a rounded surface.

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9. A method for mounting vibrational filters, said method comprising:

providing a first plurality of wires oriented in a first direction;

engaging said first plurality of wires with a second plurality of wires oriented in a second direction to form a plurality of intersections therebetween;

5 welding said first plurality of wires to said second plurality of wires at said plurality of intersections to form a support screen; and

securing one or more filtering screens to said support screen.

10. The method of claim 9, further comprising:

10 providing that at least one of said first plurality of wires or said second plurality of wires comprises a planar support surface for supportably engaging at least one of said one or more filtering screens.

11. The method of claim 9, further comprising:

15 providing that each of said first plurality of wires and said second plurality comprise a planar surface.

12. The method of claim 9, further comprising:

20 providing that each of said first plurality of wires and said second plurality comprise a substantially rounded surface.

13. A vibrational screen filtration assembly for filtering one or more materials,
comprising:

a first plurality of wires;

a second plurality of wires, said first plurality of planar wires being welded to said

5 second plurality of wires to form a support screen, said support screen having a first surface
with a first plurality openings therein formed by said first plurality of planar wires and said
second plurality of wires;

at least one additional screen mounted to said first surface of said first screen and
secured thereto, said at least one additional screen being formed with a second plurality of
10 openings, said second plurality of openings being finer than said first plurality of openings,
said first screen being mechanically stronger than said second screen.

14. The vibrational screen filtration assembly of claim 13, wherein said first plurality of
planar wires comprise a planar surface.

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15. The vibrational screen filtration assembly of claim 14, wherein said planar surface
supportingly engages said at least one additional screen.

16. The vibrational screen filtration assembly of claim 13, wherein said second plurality
20 of wires comprise a rounded surface.

17. The vibrational screen filtration assembly of claim 13, wherein said second plurality of wires comprise a cross-section with a planar surface.

18. The vibrational screen filtration assembly of claim 13, wherein said first plurality of
5 wires has a different cross-sectional shape than said second plurality of wires.

19. The vibrational screen filtration assembly of claim 13, wherein said first plurality of wires has a substantially identical cross-sectional shape as said second plurality of wires.

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